Paper No. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte PAUL D. JARAMILLO
and
FRANK H. WU

_____

Appeal No. 1999-1581
Application No. 08/651,369

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ON BRIEF

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Before HAIRSTON, FLEMING, and BARRY, Administrative Patent Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1 through 3, 5 through 11 and 13 through 16. In an Amendment After Final (paper number 5), claims 1, 2, 9 and 10 were amended.

The disclosed invention relates to word classification in a speech recognition system that allows multiple speech

attempts by a user.

Claim 1 is illustrative of the claimed invention, and it reads as follows:

> 1. A method for improving word classification performance of a speech recognition system allowing multiple speech attempts from a user, the method comprising:
>
> storing a predefined vocabulary of word models and non-word models, the word models containing speech representations of acceptable words and the non-word models containing speech representations of non-words;
>
> comparing each of the speech attempts to the word models and the non-word models to determine a plurality of best words and corresponding word scores and non-word scores for each of the speech attempts;
>
> determining at least one common best word from among all the speech attempts;
>
> determining if the at least one common best word is a highest-ranking best word based on the corresponding word scores for all speech attempts by the user;
>
> if so, classifying the multiple speech attempts as the at least one common best word if the at least one common best word is the highest-ranking best word for all the speech attempts; and
>
> if not, performing an objective test on each of the at least one common best word to classify the multiple speech attempts.

The references relied on by the examiner are:

Lee	5,504,805	Apr. 2, 1996
Ranta	5,640,485	Jun. 17, 1997
	(effective filing date	Jun. 4,

1993)

Claims 1 through 3, 5 through 11 and 13 through 16 stand rejected under the first paragraph of 35 U.S.C. § 112 for lack of enablement.

Claims 1 through 3, 5 through 7, 9 through 11 and 13 through 15[1] stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ranta.

Claims 8 and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ranta in view of Lee.

Reference is made to the briefs (paper numbers 8 and 10) and the answer (paper number 9) for the respective positions of the appellants and the examiner.

OPINION

We have carefully considered the entire record before us, and we will reverse all of the rejections of record.

In a lengthy explanation (answer, pages 3 through 5), the examiner explains how he believes appellants' disclosed and claimed invention should have been described. In short, the

[1] Based upon the fact that claims 4 and 12 are not before us on appeal, and the additional fact that claims 8 and 16 are listed in a separate rejection under 35 U.S.C. § 103(a), we assume that claims 1 through 3, 5 through 7, 9 through 11 and 13 through 15 are the only claims that the examiner should have listed under this particular rejection (answer, page 5).

examiner is of the opinion that the lowest non-word score should be compared with the highest word score. From the disclosure (specification, pages 6 and 7), it is apparent that appellants compare a non-word score with an associated word score, regardless of its size. Even if the examiner's ratio calculation would yield a better speech recognition system than the one disclosed and claimed by appellants, the examiner still has the burden of demonstrating that appellants' chosen method of calculating a ratio between an associated word score and a non-word score will not result in a workable speech recognition system. In the absence of such a showing, the burden never shifted to appellants to prove that the specification is indeed enabling, and we must, therefore, accept the appellants' argument (brief, pages 5 and 6; reply brief, pages 1 through 4) that the disclosed and claimed invention is described in sufficient detail to satisfy the enablement requirement of the first paragraph of 35 U.S.C. § 112. In re Wright, 999 F.2d 1557, 1561, 27 USPQ 1510, 1513 (Fed. Cir. 1993). Thus, the rejection of claims 1 through 3, 5 through 11 and 13 through 16 under the first paragraph of 35 U.S.C. § 112 is reversed.

Turning to the obviousness rejection of claims 1 through 3, 5 through 7, 9 through 11 and 13 through 15, the examiner indicates that Ranta teaches updating word probabilities with each speech attempt in a speech recognition system (answer, page 6). The examiner acknowledges (answer, page 6) that Ranta does not teach "classification according to the *highest-ranking* best word for *all* speech attempts by the user," and "computation of *non-word* probabilities." According to the examiner (answer, page 6), appellants' disclosed and claimed approach is "an arbitrary design choice," and that it would have been obvious to the skilled artisan to detect words "not in the controlled vocabulary or of background acoustic noise."

Inasmuch as Ranta was aware of "noise" in speech recognition systems (column 1, lines 39 through 50; and column 2, lines 52 through 60), but chose not to use it in any way to assist in the speech recognition process, we refuse to accept the examiner's notion that the appellants' use of such noise to generate non-word scores is a matter of "arbitrary design choice." Stated differently, the examiner's contention (answer, page 6) that Ranta's speech recognition system and

method "would perform equally well" as the disclosed and claimed invention can not take the place of evidence that demonstrates the obviousness of the claimed invention. In summary, the 35 U.S.C. § 103(a) rejection of claims 1 through 3, 5 through 7, 9 through 11 and 13 through 15 is reversed.

The 35 U.S.C. § 103(a) rejection of claims 8 and 16 is reversed because the teachings of Lee do not cure the noted shortcomings in the teachings of Ranta.

DECISION

The decision of the examiner rejecting claims 1 through 3,
5 through 11 and 13 through 16 under the first paragraph of 35 U.S.C. § 112 is reversed, and the decision of the examiner rejecting claims 1 through 3, 5 through 11 and 13 through 16 under 35 U.S.C. § 103(a) is reversed. Accordingly, the decision of the examiner is reversed.

REVERSED

KENNETH W. HAIRSTON)
Administrative Patent Judge)
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MICHAEL R. FLEMING	)	APPEALS AND
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LANCE LEONARD BARRY	)	
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KWH:hh

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